Clever solar devices
Installation Guide
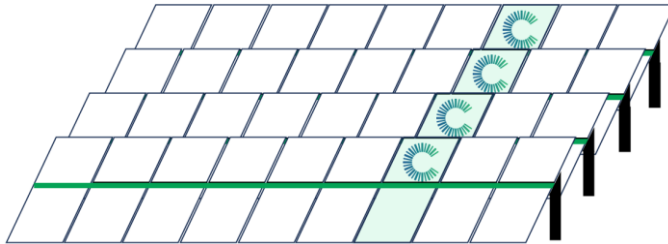
cleversd.com
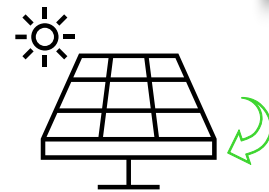info@clevesd.com
+34.644.677.311

Clever Dx Configuration

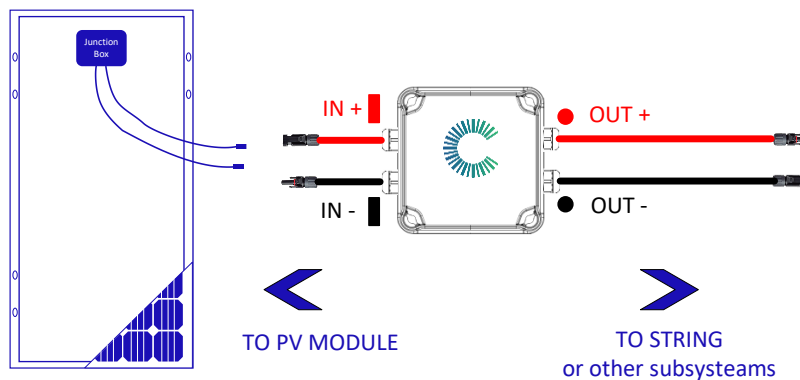## How to install your Clever Dx:

You Will need: **one** Clever Dx connected to one PV module **per string**.

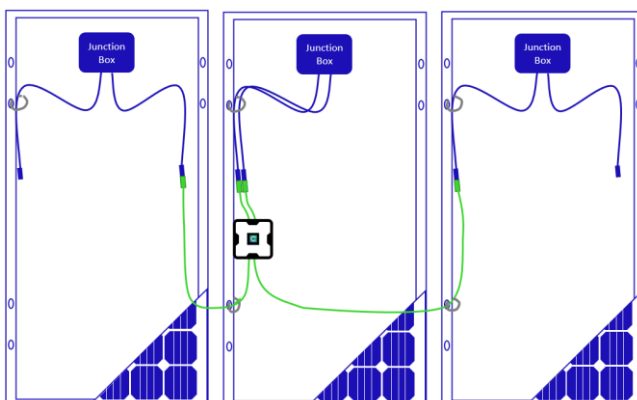1. Turn around to access the backside of the PV module and connect to the junction box.

2. Just connect the MC4s connected to short cablet to PV Module and MC4s connected to long cable to the string.
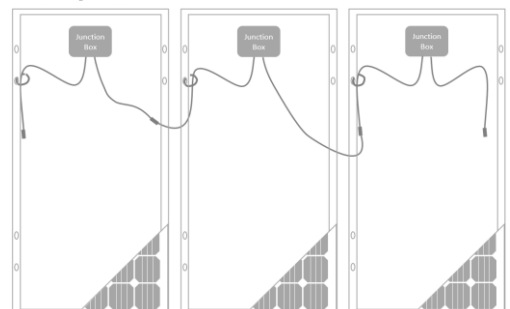
IN +   OUT +

IN -   OUT -

TO PV MODULE

TO STRING
or other subsysteams

4. Disconnect the cables

5. Reconnect positive to positive – negative to negative

6. Attach Clever Dx enclosure to the structure with plastic ties.

This is how it should look like:

AFTER

Junction Box   Junction Box   Junction Box

BEFORE

Junction Box   Junction Box   Junction Box

In case you are using Microinverters or Power Optimizers:

Polarity, powerup and power down proceed are critical. There are some installers that decide to cover the PV module during installation, be aware that it is not necessary but if you do, this is the correct process.
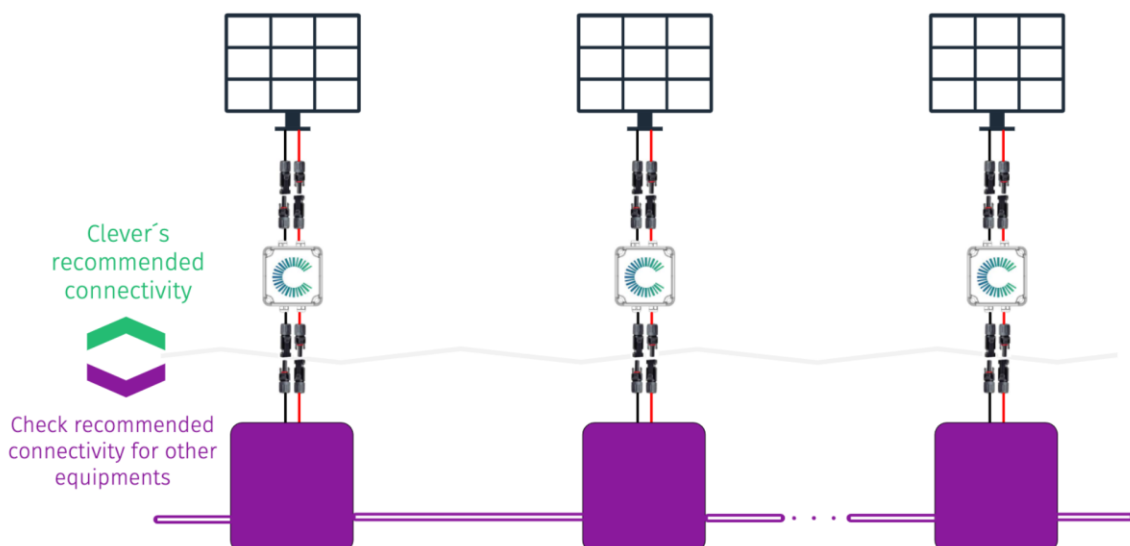
> Warning: during the day, do not cover the module to avoid its illumination, if the device is connected it could be damaged.
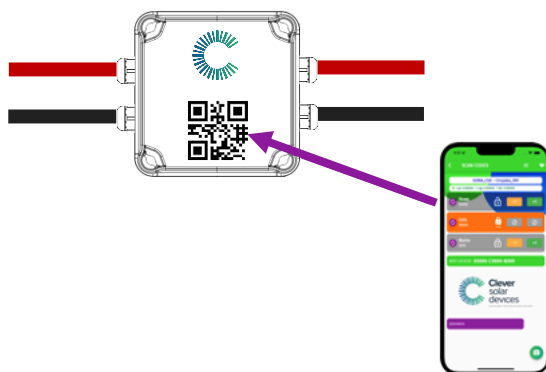
Order of disconnection:

i.   Disconnect AC line
ii. Disconnect AC cable from the microinverter/optimizer
iii. Disconnect the DC cable between the module and the microinverter/optimizer

Start up:

i.   Connect module DC cable to Clever Dx input
ii. Connect Clever Dx DC output cable to DC microinverter/optimizer input
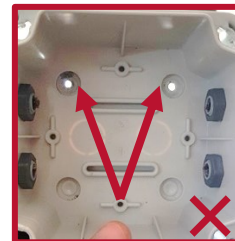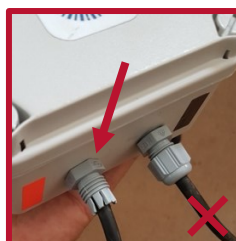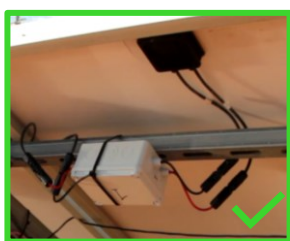iii. Connect AC/DC line to microinverter/optimizer
iv. Connect to the grid

Clever's recommended connectivity

Check recommended connectivity for other equipments

7. Scan the QR code with the mobile app.

8. See software configuration in Clever Dx Installer TOOL setup below.

> **Warning:** do not alter the Clever Dx box under any circumstances, as it will cause lost of support and warranty along with the IP67 protection.

> **Warning:** connect only to photovoltaic modules, do not connect to batteries, power supplies or similar devices.

Setup of the Clever Dx app

1. Install the **"Installer tool app"** on your mobile device *(Android available):*

https://play.google.com/store/apps/details?id=com.cleversd.installer_tool

SCAN ME

2. Open Installer tool by pressing the application icon on your mobile.
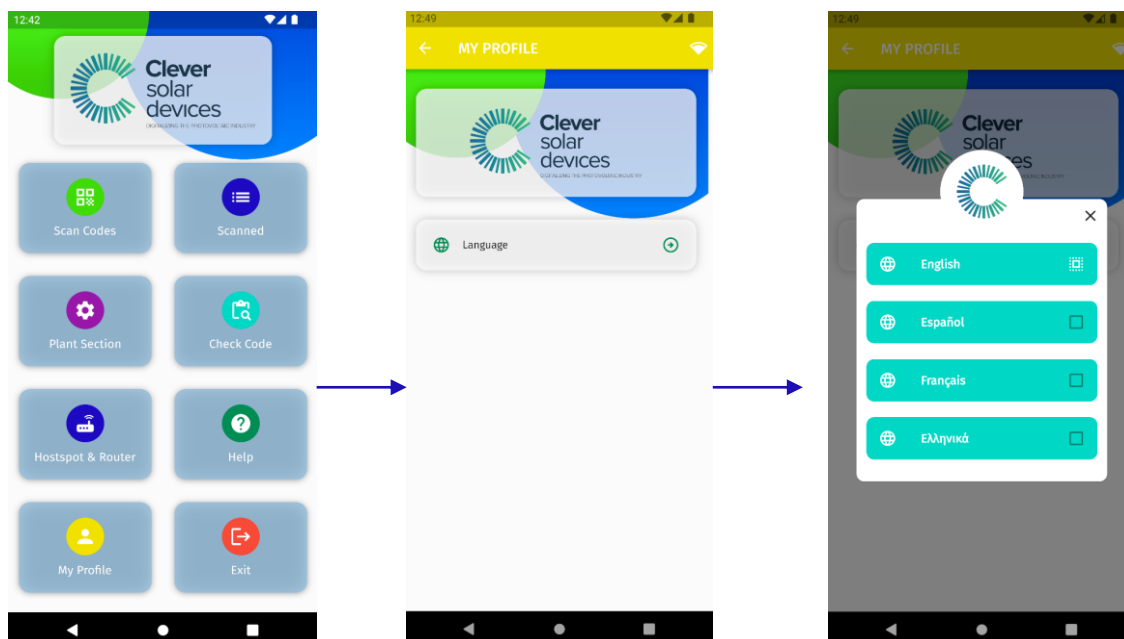

3. Log in with your username and password.
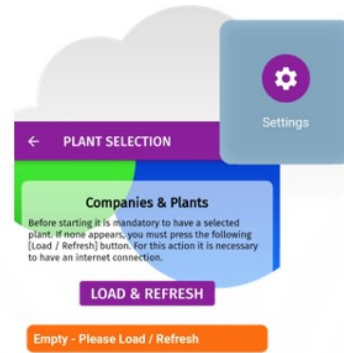

4. Once logged, you can access the Main Menu.

Clever Dx app Configuration

Before starting, select your language configuration:

1. Select your company and plant

Press **"Load / Refresh"** and select the Power Plant where you would like to install the Clever Dx Devices.
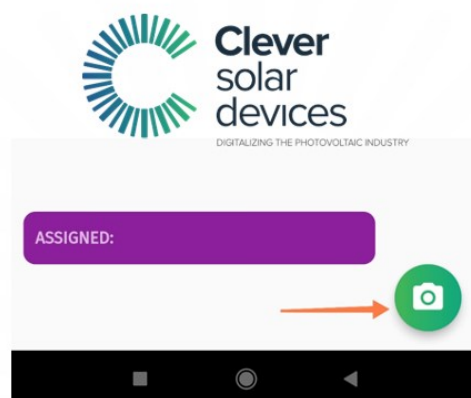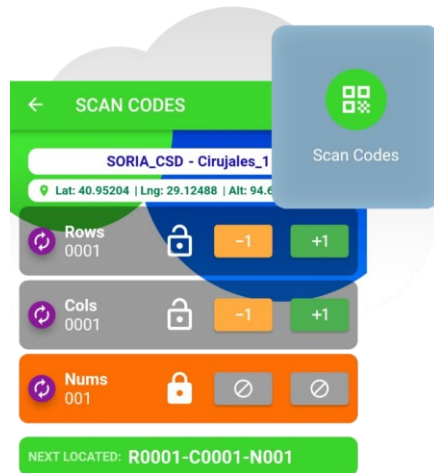

Register your Clever Dx Device

1. The app requieres the following permissions to be allowed:
   a. Location
   b. Camera

NOTE: If in the process of allowing any permission the app closes/turns off, access the app again. This will only happen the first time you enable permissions.

2. Press the camera icon and go to your mobile camera to read the QR code placed on the Clever Dx device.
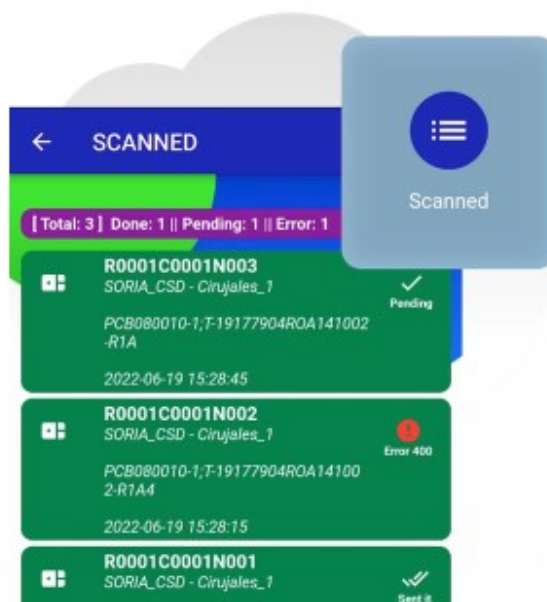
3. Go to the "Scan Codes" section:

NOTE: Bear in mind to provide numbers according to your installation in order to identify each device number with a unique position in your instalaltion (Rows, Cols, Nums).

The section in Orange Will be an auto-incrementing value that you can select manually.

Clever Dx Device Options
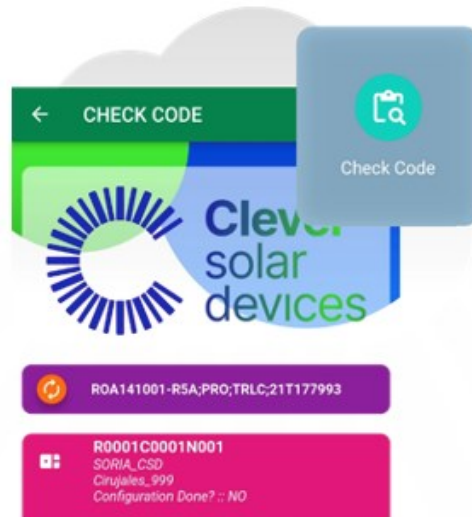
1. Scanned codes:
   If you wish, you can see the Devices you have scanned, and information on when and which location they have been assigned to.
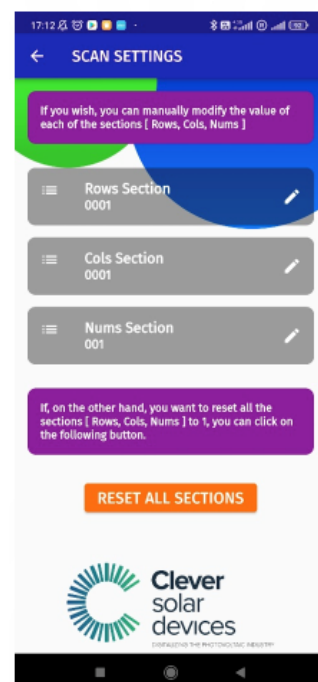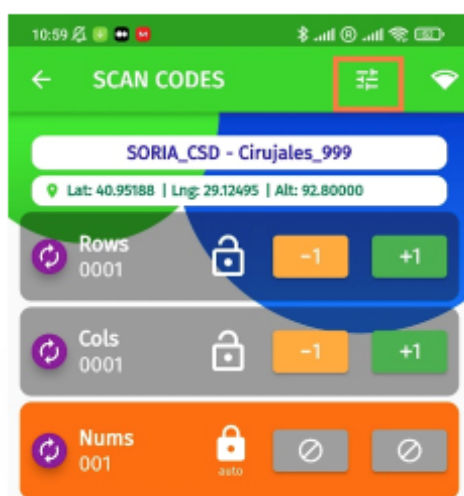
2. Check the Code:

But, in case of doubt, you can always check the device to know what's its current status and history,

3. Scan settings:

If you wish, you can manually modify the value of each section [Rows, Cols, Nums] or reset them all to 1.

To find this option, you should first Access the Scan Code section and then click on the following icon:
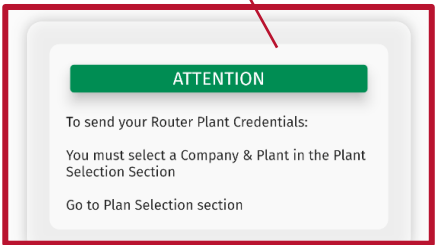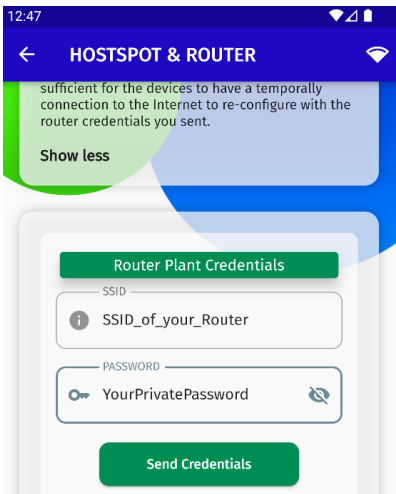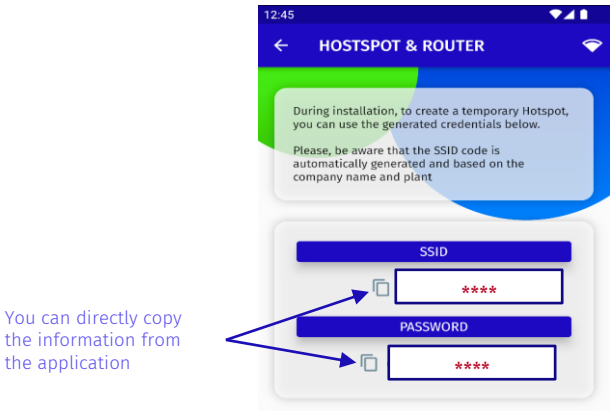
Hotspot Configuration

1. Make sure that your that your plant is properly selected:

2. Send your WIFI network name and password

3. Create a TEMPORARY WIFI network with your specific WIFI name and password, those are UNIQUE and specifically created for you. We highly recommend not to share your WIFI name and password.

You can directly copy the information from the application

Congratulations! Your Clever Dx Devices are setup and your PV modules ready to be diagnosed!